

IN THE SPECIFICATION:

Please amend paragraph [0050] of the original filed specification as follows:

-- [0050] The high-to-low switch controller **100** implements the decision of switching the resolution from high resolution to low resolution. In the preferred embodiment the high-to-low switch controller **100** consists of three comparators **101**, **102** and **103**, as shown in Figure 4, AND gate **104** and the OR gate **105**. The inputs to the high-to-low switch controller **100** are the signals **S111**, **S103** and **S110**. The comparator **101** compares the quantization scale estimate Q , available on signal **S111**, to a predetermined threshold T_Q and its output is set high if $Q > T_Q$. The comparator **102** compares the motion estimate M , available on signal **S110**, to a predetermined threshold T_M and its output is set high if $M > T_M$. The comparator **103** compares the decoder buffer level B_{dec} , available on signal **S103**, to a predetermined threshold T_B and its output is set high if $B_{dec} < T_B$. The outputs of comparators **101** and **102** are passed through the AND gate **104** and the result is ORed with the output of comparator **103**. The output signal **S120** of the OR gate **105** signifies the decision taken by the high-to-low switch controller, If the output is high, the resolution should be switched from high resolution to low resolution. Thus, in the preferred embodiment the high-to-low switch controller implements the following criterion switch from high resolution to low resolution if the following condition C_1 evaluates to true.

$$C_1 = \{ \{Q > T_Q\} \text{ \&\& } \underline{\text{AND}} \{M > T_M\} \} \text{ \&\& } \underline{\text{OR}} \{B_{dec} < T_B\}$$

--

Please amend paragraph [0053] of the original filed specification as follows:

-- [0053] The low-to-high switch controller **110** implements the decision of switching the resolution from low resolution to high resolution. The low-to-high switch controller **110** consists of three comparators **111**, **112** and **113** and the AND gate **114**. The inputs to the low-to-high switch controller **110** are the signals **S111**, **S103**, **S105**, **S106** and **S110**. The comparator **111** computes the function $Q.M^2$, where Q and M are as aforementioned, and compares the value of this function to a preset threshold T_{QM} and sets its output high if $Q.Mz < T_Q$. The comparator **112**

compares the current frame number, which information is available on S106, with the frame number at which the last scene change occurred, which information is available on S105. The output of the comparator 112 is set high if $F_{curr} - F_{sc} > T_{sc}$, where F_{curr} refers to the frame number of the current frame, F_{sc} refers to the frame number at which the last scene change occurred and T_{sc} refers to a fixed preset threshold. The comparator 113 compares the decoder buffer level B_{dec} , available on S103, to a predetermined threshold T_{B2} and its output is set high if $B_{dec} > T_{B2}$. The outputs of comparators 111, 112 and 113 are passed through the AND gate 114. The output S121 of gate 114 signifies the decision taken by the low-to-high switch controller 110. If the output is high, the resolution is to be switched from low resolution to high resolution. The low-to-high switch controller 110 implements a switch from low resolution to high resolution if the following condition C2 evaluates to true.

$$C_2 = \{Q.M^2 > T_{QM}\} \text{ \&\& } \underline{\text{AND}} \{B_{dec} > T_{B2}\} \text{ \&\& } \underline{\text{AND}} \{F_{curr} - F_{sc} > T_{sc}\}$$

--